4121-127

REMARKS

A marked-up version of amended paragraph in the specification and amended claims 1-16 are included herewith in Appendix A.

It is requested that the examination and prosecution of this application proceed on the basis of the English translation of the PCT International application included herewith and these amended claims 1-16.

Respectfully submitted,

Marianne Fuierer

Registration No. 39,983 Attorney for Applicants

INTELLECTUAL PROPERTY/ TECHNOLOGY LAW P. O. Box 14329 Research Triangle Park, NC 27709 Phone: (919) 419-9350

Fax: (919) 419-9354 Attorney File: 4121-127

4121-127

APPENDIX A

In the Specification

On the top of page 3, please replace the first paragraph with the following amended paragraph:

The expression "oncogene" comprises any gene or portions thereof which may have a cell-transforming property. Examples of such genes are erb A, erb B, fos, myc, E6, E7 and the early region of SV40, i.e. the gene for SV40 T-Ag, as well as mutated p53. The oncogene may also comprise a nucleotide sequence[s] (SEQ ID NO: 1) coding for a strong, i.e. immunodominant, T-cell epitope, e.g. the MHCI-restricted epitope n118 of the LCM virus nucleoprotein (SEQ ID NO: 2).

On the bottom of page 3, please replace the last paragraph with the following amended paragraph.

Preferred mammals of the present invention are mice which contain the gene for the SV40 T-Ag under the control of the WAP promoter. The SV-40 T-Ag gene may also contain a nucleotide sequence[s] (SEQ ID NO: 1) coding for a strong, i.e. immunodominant, T-cell epitope, e.g. epitope n118 of the LCM virus nucleoprotein (SEQ ID NO: 2). Such mice are referred to as WAP-T or WAP-T-NP (cf. figure 1). The mice WAP-T-1, WAP-T-2, WAP-T-10, WAP-T-NP6, WAP-T-NP8 and WAP-T-NP10 are preferred. These mice are distinguished as follows:

In the Claims

 A mammal with inducible ductal carcinoma in situ (DCIS), wherein the mammal contains an oncogene that can be activated by lactotropic hormones and comprises a <u>nucleotide</u> sequence coding for a strong T-cell epitope, the <u>nucleotide</u> sequence being SEQ ID NO: 1.

- 2. The mammal according to claim 1, wherein the oncogene is controlled by the WAP promoter.
- 3. The mammal according to claim 1 [or 2], wherein the oncogene is a gene coding for SV40 T-Ag.
- 4. The mammal according to claim 1 [any of claims 1 to 3], wherein the sequence codes for the n118 epitope of the LCM virus nucleoprotein having the amino acid sequence of SEQ ID NO: 2.
- 5. The mammal according to claim 3 [any of claims 1 to 4], wherein the mammal is selected from the group consisting of WAO-T-NP6, WAP-T-NP8 and WAP-T-NP10. [those of figures 7, 8 and 9.]
- 6. The mammal according to claim 1 with inducible ductal carcinoma in situ (DCIS), wherein the mammal contains an oncogene that can be activated by lactotropic hormones and is selected from the group consisting of WAP-T-1, WAP-T-2 and WAP-T-10. [those of figures 4, 5 and 6.]
- 7. The mammal according to claim 1 [any of claims 1 to 6], wherein DCIS develops into an invasive ductal mammary carcinoma.

- 8. The mammal according to claim 1 [any of claims 1 to 7], wherein the lactotropic hormones are estrogen, prolactin, insulin, and hydrocortisone.
- 9. A method of providing a mammal that contains an oncogene that can be activated by lactotropic hormones [according to any of claims 1 to 5], comprising the steps of:
 - (a) introducing a DNA coding for an oncogene into inseminated oocytes of a mammal, the DNA code being SEQ ID NO: 1 and being controlled by a promoter specific to lactotropic horomones,
 - (b) implanting the oocytes from (a) into
 pseudopregnant mammals, and
 - (c) selecting the progeny obtained in (b) for the formation of DCIS.
- 10. The method according to claim 9, wherein the promoter is the WAP promoter.
- 11. The method according to claim 9 [or 10], wherein the oncogene is a gene coding for SV40 T-Ag.
- 12. The method according to claim 9 [any of claims 9 to 11], wherein the sequence codes for the n118 epitope of the LCM virus nucleoprotein having the amino acid sequence of SEQ ID NO: 2.
- 13. The method according to <u>claim 12</u> [any of claims 9 to 12], wherein the lactotropic hormones comprise estrogen, prolactin, insulin and hydrocortisone.

14. The method according to $\underline{\text{claim 9}}$ [any of claims 9 to 13], wherein DCIS develops into invasive ductal mammary carcinoma.

- 15. Use of the mammal according to claim 1 [any of claims 1 to 8] for studying DCIS, its progression towards an invasive ductal carcinoma and the latter.
- 16. Use of the mammal according to claim 1 [any of claims 1 to 8] for the research and development of diagnostic markers and therapeutic agents for a DCIS or an invasive ductal carcinoma.